

MODULE VII
CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS
SCHEDULE OF COMPLIANCE

VII.A. SOLID WASTE MANAGEMENT UNITS

The Permittee shall conduct a corrective action investigation, in accordance with Module VII, for each Solid Waste Management Unit (SWMU) specified in Thiokol RCRA Facility Assessment (RFA) Summary List (Attachment 5).

- VII.A.1 The Executive Secretary may append additional Solid Waste Management Units to those listed in Thiokol's RFA Summary List (Attachment 5), in accordance with R315-3-15., based on additional information received by the Permittee, the Executive Secretary, the Administrator, or any other knowledgeable source.

VII.B. STANDARD CONDITIONS

- VII.B.1. Failure to submit the information required by Module VII or falsification of any submitted information, is grounds for termination of this permit in accordance with R315-3-16.
- VII.B.2. The Permittee shall sign and certify all plans, reports, notifications, and other submissions to the Executive Secretary in accordance with Condition I.G.
- VII.B.3. The Permittee shall submit a minimum of three (3) copies of each plan, report, notification, or other submissions within Module VII, to the Executive Secretary.
- VII.B.4. Upon written approval to the Executive Secretary, all plans and schedules required by the conditions in Module VII, shall be incorporated into Module VII of this permit in accordance with Condition VII.I. Any noncompliance with such approved plans and schedules shall be deemed noncompliance with this permit.
- VII.B.5. Upon written approval from the Executive Secretary in accordance Condition VII.I., the Permittee shall receive extension(s) of the specified compliance schedule due date(s) for the submittal(s) required by Module VII.
- VII.B.6. If the Executive Secretary determines that further actions beyond those provided by Module VII, or changes to that which are stated herein, are warranted, the Executive Secretary shall modify Module VII in accordance with Condition VII.I.
- VII.B.7. All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale

data, and other supporting information gathered or generated during activities undertaken pursuant to Conditions in Module VII shall be maintained at the Thiokol Corporation, Box Elder County, Utah during the effective term of this permit.

VII.C. RCRA FACILITY INVESTIGATION

- VII.C.1. The Permittee shall conduct a RCRA Facility Investigation to determine the nature and extent of known and suspected releases of hazardous wastes and/or hazardous waste constituent(s) from each Solid Waste Management Unit at the Facility and to gather data to support the Corrective Measures Study. The Permittee shall conduct the RCRA Facility Investigation in accordance with the requirements specified in Appendix A. [\(Click in red box for appendix A\)](#)
- VII.C.1.a. The Permittee shall prepare and submit the RCRA Facility Investigation, Task I Report, as specified in Appendix A, for each Solid Waste Management Unit in which a release of hazardous waste or hazardous waste constituent(s) has not been documented.
- VII.C.1.a.i. The Permittee shall conduct a RCRA Facility Investigation-Phase I, in accordance with Appendix A, Task I, D, for each Solid Waste Management Unit which has not had a release of hazardous waste.
- VII.C.1.a.ii. The Permittee shall evaluate the RCRA Facility Investigation-Phase I and identify Solid Waste Management Units that require additional investigation under the RCRA Facility Investigation Phase II (Task II and Task III).
- VII.C.1.a.iii. Based on the data collected in the RCRA Facility Investigation-Phase I, the Permittee shall prioritize each Solid Waste Management Unit identified for additional investigation pursuant to permit condition VII.C.1.a.ii., according to the Solid Waste Management Unit's threat to human health or the environment.
- VII.C.1.a.iv. Based on the classification of the Solid Waste Management Unit(s), pursuant to permit condition VII.C.1.a.iii., the Permittee shall identify a need, if applicable, and recommend an alternate RCRA Facility Investigation schedule(s) for the additional investigation of any Solid Waste Management Units' potential or imminent threat to human health or the environment.
- VII.C.1.a.v. The Executive Secretary may modify the RCRA Facility Investigation schedules, pursuant to permit conditions VII.I.1. and VII.I.3., to allow additional investigations under the RCRA Facility Investigation-Phase II (Task II and Task III) to be conducted according to the prioritization of the Solid Waste Management Units, in

accordance with Conditions VII.C.1.a.iii. and VII.C.1.a.iv.

- VII.C.1.a.vi. The Permittee shall prepare and submit the results of the RCRA Facility Investigation-Phase I in the Task I Report.
- VII.C.1.b. The Permittee shall conduct the RCRA Facility Investigation for the Solid Waste Management Units contained in Thiokol's RFA Summary List (Attachment 5), in accordance with the schedule specified in Table One. (Click in red box for table)
- VII.C.1.c. The Permittee shall conduct a RCRA Facility Investigation, excluding the RCRA Facility Investigation-Phase I requirements, as specified in Appendix A, for each Solid Waste Management Unit contained in Thiokol's RFA Summary List (Attachment 5), which has had a release of hazardous waste or hazardous waste constituent(s). The RCRA Facility Investigation shall be conducted concurrently with the Task I Report specified in Condition VII.C.1.a.
- VII.C.1.d. The RCRA Facility Investigation compliance schedules specified in Table One, shall be modified in accordance with Condition VII.I.
- VII.D. INTERIM MEASURES AND VOLUNTARY CLEAN UP ACTIONS
- VII.D.1. If, during the course of any activity initiated in compliance with the permit conditions of Module VII of this permit, the Executive Secretary or the Permittee determines that a release or potential release of hazardous waste and/or hazardous waste constituent(s) from a Solid Waste Management Unit poses a threat to human health and the environment, the Permittee may be required to perform specific interim measures.
- VII.D.2. The Executive Secretary shall notify the Permittee in writing of the requirement to perform the interim measures specified in the Interim Measures Plan, in accordance with Condition VII.D.3. The Permittee shall comply with the specified Interim Measures Plan alternative (Conditions VII.D.3.a. or VII.D.3.b.) designated in the written notification.
- VII.D.3. The Permittee shall perform the requirements of the Interim Measures Plan in accordance with the alternative specified in either Condition VII.D.3.a. or VII.D.3.b.
- VII.D.3.a. The Executive Secretary shall determine specific actions to implement the interim measures. The Executive Secretary shall provide an Interim Measures Plan with the written notification specified in Condition VII.D.2. Or;

- VII.D.3.b. Within thirty (30) calendar days of receiving the written notification requiring the Interim Measures Plan as specified in VII.D.2., the Permittee shall provide, the Interim Measures Plan to the Executive Secretary for approval.
- VII.D.4. The Permittee may initiate voluntary clean up actions in accordance with Conditions VII.D.5 and VII.D.6.
- VII.D.5. In determining whether an interim measure(s) is required, the Executive Secretary (or the Permittee in the case of a voluntary cleanup action) shall consider the following:
- VII.D.5.a. Time required to develop and implement a final remedy;
- VII.D.5.b. Actual and potential exposure of human and environmental receptors;
- VII.D.5.c. Actual and potential contamination of drinking water supplies and sensitive ecosystems;
- VII.D.5.d. The potential for further degradation of the medium absent of interim measures;
- VII.D.5.e. Presence of hazardous waste in containers that may pose a threat of release;
- VII.D.5.f. Presence and concentration of hazardous waste including hazardous waste constituent(s) in soils that have the potential to migrate to groundwater or surface water.
- VII.D.5.g. Weather conditions that may affect the current levels of contamination;
- VII.D.5.h. Risks of fire, explosion, or accident; and
- VII.D.5.i. Other situations that may pose threats to human health and the environment.
- VII.D.6. If the Executive Secretary determines the need for an interim measure(s), the Permittee shall submit for approval by the Executive Secretary an Interim Measures Plan. The Interim Measures Plan or a voluntary cleanup plan shall identify specific action(s) to be taken to implement the interim measures and a schedule for implementing the required measures. The Interim Measures Plan or the voluntary clean up plan shall be incorporated into this permit. The Interim Measures Plan or a voluntary clean up plan shall include, but not be limited to the following:
- VII.D.6.a. Objectives of the interim measures shall include how the measure is mitigating a potential threat to human health (health and safety requirements) and the

environment and/or is consistent with and integrated into any long term solution at Thiokol;

- VII.D.6.b. Data collection quality assurance and data management information;
 - VII.D.6.c. Design plans and specifications, construction requirements, operation and maintenance requirements, project schedules, and final design documents;
 - VII.D.6.d. Construction quality assurance objectives, inspection activities, sampling requirements, and documentation; and
 - VII.D.6.e. Schedule for submittal of the following reports; progress reports, interim measures workplan, final design documents, draft interim measures report, and final interim measures report.
- VII.E. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNITS**
- VII.E.1. The Permittee shall notify the Executive Secretary in writing, of any newly identified Solid Waste Management Unit(s) after the effective date of this permit, not identified in Condition VII.A., within thirty (30) calendar days of discovering the Solid Waste Management Unit(s). The notification shall include the location of the new Solid Waste Management Unit(s) and information on the suspected or known wastes at the site.
 - VII.E.2. Within one hundred fifty (150) calendar days following discovery of the Solid Waste Management Unit(s), the Permittee shall submit a Solid Waste Management Unit Assessment Plan to the Executive Secretary.
 - VII.E.3. The Solid Waste Management Unit Assessment Plan shall include:
 - VII.E.3.a. A description of past and present operations at the unit(s); and
 - VII.E.3.b. Any groundwater, surface water, soil (surface or subsurface strata), or air sampling and analysis data needed to determine whether a release of hazardous waste and/or hazardous waste constituent(s) from such unit(s) is likely to occur. The Solid Waste Management Assessment Plan shall demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and/or hazardous waste constituent(s) from the newly discovered Solid Waste Management Units to the environment.

- VII.E.4. The Solid Waste Management Unit Assessment Plan shall be evaluated by the Executive Secretary and;
- VII.E.4.a. The Permittee shall receive written approval from the Executive Secretary for the Solid Waste Management Unit Assessment Plan; or
- VII.E.4.b. The Permittee shall receive written notice from the Executive Secretary of the Solid Waste Management Unit Assessment Plan's deficiencies and the written notice will specify a due date for submittal of a revised assessment plan; or
- VII.E.4.c. The Permittee shall receive written notice from the Executive Secretary of the revisions incorporated by the Executive Secretary in the Solid Waste Management Unit Assessment Plan. The revised assessment plan shall become the approved Solid Waste Management Assessment Plan.
- VII.E.5. The Solid Waste Management Unit Assessment Plan, as approved by the Executive Secretary specified in Condition VII.E.4., shall be incorporated within Module VII in accordance with Condition VII.I. The Permittee shall be notified in writing of the approval of the permit modification.
- VII.E.6. The Permittee shall implement the approved Solid Waste Management Assessment Plan within thirty (30) calendar days of receiving written notice of the permit modification approval specified in Condition VII.E.7.
- VII.E.7. The Solid Waste Management Unit Assessment Plan shall contain a remediation schedule for a Solid Waste Management Unit Assessment Report including the date the Report will be submitted to the Executive Secretary.
- VII.E.8. The Solid Waste Management Unit Assessment Report shall describe all results obtained from the implementation of the approved Solid Waste Management Unit Assessment Plan. For each newly listed Solid Waste Management Unit, the Report shall provide:
- VII.E.8.a. The Solid Waste Management Unit location, identified on a map;
- VII.E.8.b. The type and function of the unit, including general dimensions and a structural description;
- VII.E.8.c. The period during which the unit was operated; and
- VII.E.8.d. A list of all wastes managed at the Solid Waste Management Unit and results of all sampling and analysis used to determine whether releases of hazardous wastes

and/or hazardous waste constituent(s) have occurred, are occurring, or are likely to occur from the unit.

VII.E.9. Based on the results of Solid Waste Management Unit Assessment Report, the Executive Secretary shall determine the need for further investigations at specific unit(s) included in the Solid Waste Management Unit Assessment. If the Executive Secretary determines that such investigations are needed, the Executive Secretary shall require the Permittee to prepare a plan for such investigations. This plan shall be reviewed for approval as part of the RCRA Facility Investigation Workplan under Condition VII.C.

VII.E.10. Within fifteen (15) days of discovery, the Permittee shall notify the Executive Secretary in writing, of any release(s) of hazardous waste and/or hazardous waste constituent(s) discovered during the course of groundwater monitoring, field investigation, environmental auditing, or other activities undertaken during the RCRA Facility Investigation. Such releases may be from already documented or newly identified units. The Executive Secretary shall require further investigation of the new releases. A plan for such investigation will be reviewed for approval as part of the RCRA Facility Investigation Workplan under Condition VII.C.

VII.F. DETERMINATION OF NO FURTHER ACTIONS

VII.F.1. The Permittee may petition the Executive Secretary to terminate the Corrective Action for Solid Waste Management Units Schedule of Compliance (Module VII) in accordance with R315-3-15.

VII.F.2. The Corrective Action for Solid Waste Management Units, Schedule of Compliance termination petition shall contain information based on the RCRA Facility Investigation that demonstrates that there are no releases of hazardous waste or hazardous waste constituent(s), that pose a threat to human health or the environment, from Solid Waste Management Units at the Thiokol Corporation, Box Elder County, Utah.

VII.F.3. A determination of no further action, in accordance with Condition VII.F.1., shall not preclude the Executive Secretary from requiring continued or periodic monitoring of air, soil, groundwater, or surface water when site-specific circumstances indicate that there is a potential for releases of hazardous waste including hazardous waste constituent(s) to occur.

VII.F.4. A determination of no further action, in accordance with Condition VII.F.1., shall not preclude the Executive Secretary from requiring further investigations, studies, or remediation at a later date if new information or subsequent analysis indicates a

release or potential of a release from a Solid Waste Management Unit at the Thiokol Corporation, Box Elder County, Utah. In such a case, the Executive Secretary shall initiate either a modification to the Corrective Action Schedule of Compliance (Module VII) in accordance with R315-3-15. to rescind the determination of VII.F.1.

VII.G. CORRECTIVE MEASURES STUDY AND IMPLEMENTATION

- VII.G.1. Based on the results of the RCRA Facility Investigation, the Permittee shall describe the alternatives for remediation of the contamination, treatment and/or other remediation of the contamination. The Permittee shall conduct the Corrective Measures Study in accordance with the requirements specified in Appendix B (Task I, II, III, and IV) (Click in red box for appendix B).
- VII.G.2. Upon the Executive Secretary's approval of the Corrective Measures Study, pursuant to Condition VII.G.1., the Permittee shall submit, to the Executive Secretary for approval, the Corrective Measures Implementation Program Plan, specified in Appendix B, Task IV.A.
- VII.G.3. Upon the Executive Secretary's approval of the Corrective Measures Implementation Program Plan, pursuant to Condition VII.G.2., the Permittee shall conduct the Corrective Measures Implementation Program Plan specified in Appendix B, Task IV [the corrective measures design (Task IV.B.) and construction of the corrective measures (Task IV.C.)].
- VII.G.4. The Permittee shall conduct the Corrective Measures Study and prepare the Corrective Measures Implementation Program Plan, as specified in Conditions VII.G.1. and VII.G.2., according to the schedule specified in Table Two.
- VII.G.5. The Permittee shall submit to the Executive Secretary for approval a compliance schedule for conducting the Corrective Measures Implementation Program Plan, as required by Condition VII.G.3.
- VII.G.5.a. The Permittee shall provide a justification for each compliance date in the compliance schedule based on the complexity of the Corrective Measures Implementation Program Plan and reasonable contract and administrative time requirements.
- VII.G.5.b. On or before the compliance date for submittal of the draft Corrective Measures Implementation Program Plan specified in Table Two, the Permittee shall submit the compliance schedule and subsequent justification, pursuant to permit condition

VII.G.5., to the Executive Secretary for approval.

- VII.G.5.c. Upon the Executive Secretary's approval of the Corrective Measures Implementation Program Plan compliance schedule, the compliance schedule shall be incorporated into this permit concurrently with the final Corrective Measures Implementation Program Plan, in accordance with R315-3-15.
- VII.G.6. The Permittee shall conduct the Corrective Measures Implementation Program Plan, specified in Condition VII.G.3., in accordance with Condition VII.G.5.
- VII.G.7. The Corrective Measures Study and Corrective Measures Implementation Program Plan compliance schedules, specified in Table Two, (click red box) shall be modified in accordance with Condition VII.I.

VII.H. REPORTING REQUIREMENTS

- VII.H.1. The Permittee shall submit to the Executive Secretary written semi-annual progress reports of all activities conducted pursuant to the Conditions of Module VII. The Permittee shall initially submit the semi-annual progress reports no later than ninety (90) calendar days after the effective date of this permit.
- VII.H.2. The semi-annual progress reports shall contain:
- VII.H.2.a. A description of the work completed;
- VII.H.2.b. Summaries of all findings and all raw data;
- VII.H.2.c. Summaries of all problems encountered during the reporting period and actions taken or to be taken to rectify problems; and
- VII.H.2.d. Projected work for the next reporting period.
- VII.H.3. The Permittee shall maintain copies of other reports, drilling logs, and data at the Thiokol Corporation, Box Elder County, Utah during the effective period of this permit. The Permittee shall provide copies of the said reports, logs, and data to the Executive Secretary upon request.
- VII.H.4. As specified under condition VII.B.5., the Executive Secretary may require the Permittee to conduct new or more extensive assessments, investigations, or studies, as needed, based on information provided in these progress reports or other supporting information.

VII.I. MODIFICATION OF THE CORRECTIVE ACTION SCHEDULE OF COMPLIANCE (MODULE VII)

- VII.I.1. A request for modifications of the final compliance dates pursuant to the permit conditions in Module VII shall be submitted to the Executive Secretary for approval, in accordance with R315-3-15. Final compliance dates in the Corrective Action Schedule of Compliance include:
- VII.I.1.a. The compliance date(s), as specified in Table One, for submittal of the RCRA Facility Investigation Final Report (Appendix A, Task IV);
- VII.I.1.b. The compliance date(s), specified in Table One, for submittal of the Corrective Measures Study Report, in accordance with Condition I.G.1.;
- VII.I.1.c. The compliance date(s), as specified in Table Two, for submittal of the final Corrective Measures Implementation Program Plan, in accordance with Condition VII.G.2.;
- VII.I.1.d. Once established in accordance with Condition VII.G.5., the compliance date(s) for submittal of the as built corrective measures final design and construction plans, in accordance with Condition VII.G.3.;
- VII.I.1.e. Compliance dates specified in Table Two, for implementing the approved plans and reports; and
- VII.I.1.f. Compliance dates for semi-annual submittal of progress reports.
- VII.I.2. Pursuant to R315-3-15., the compliance schedules specified in Tables One and Two, shall be modified if the Executive Secretary determines that good cause exists.
- VII.I.2.a. Failure to obtain adequate funds to conduct the Corrective Measures Implementation Program Plan, pursuant to Condition VII.G.3., shall be considered good cause for modification of the compliance schedule(s), Table Two, as specified in Condition VII.I.2., only in accordance with:
- VII.I.2.a.i. The Permittee's best effort shall be used to secure all funds that may be required for implementation of the requirements specified in Condition VII.G.3. of this permit pursuant to the compliance schedule in Table Two;
- VII.I.2.a.ii. The Permittee shall seek, by the most expeditious means possible, appropriations funding to achieve the compliance schedule in Table Two,

- VII.I.2.a.iii. If the Executive Secretary determines that good cause exists in accordance with the Conditions under VII.I.2.a., the Executive Secretary shall modify the compliance schedule.
- VII.I.2.a.iv. For any approved modification, the compliance schedule specified in Tables One and Two shall be modified to provide relief from the original compliance schedule timeframes only for the subsequent calendar year. All successive compliance dates after the end of such calendar year shall be modified to reflect the original timeframes specified prior to the modification request under Condition VII.I.2.a.
- VII.I.2.b. Failure to obtain adequate funds or appropriations from Congress shall not in any way release the Permittee from its obligation to comply with the Corrective Measures Implementation (Condition VII.G.3.) or any other requirement of this permit or RCRA.
- VII.I.2.c. If adequate funds for Corrective Measures Implementation are not available, the Executive Secretary and the Control Board reserve the right to pursue any actions deemed necessary to protect human health and the environment, not excluding judicial recourse or termination of this permit.
- VII.I.3. The Permittee shall submit a request for modifications of the interim compliance dates that do not affect the final compliance dates to the Executive Secretary for approval. If the Executive Secretary approves the interim compliance date modifications, Tables One and Two shall incorporate the modified compliance dates as approved and such change shall not be considered a permit modification under R315-3-15.